AMENDMENT

IN THE SPECIFICATION

Please amend the application without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents as follows.

On page 9, line 16 (actual text count)

-- 2. Sequence (SEQ ID NO:3)~~(Seq. ID No. 2)~~: --

On page 14, line 5 (actual text count)

-- The DNA sequences of the invention identified with the help of the transformed yeast strains, e.g., sequences SEQ ID NOs:1 and 3~~Seq. No. 1 and 2~~, can be introduced into plasmids and thereby be combined with steering elements for expression in eukaryotic cells (see Example 4). These steering elements are, on the one hand, transcription promoters, and, on the other hand, transcription terminators. Plasmids can be used to transform eukaryotic cells with the aim of expression of a translatable mRNA which makes possible the synthesis of an amino acid transporter in the cells or with the aim of expression of a non-translatable RNA, which prevents synthesis of an endogenous amino acid transporter in the cells. The expression of an RNA corresponding to the inventive sequences of plant amino acid transporters modifies the plant acid metabolism, as well as total nitrogen metabolism. The economic significance of this modification is obvious. Nitrogen is the nutrient mainly responsible for limiting growth. The viability of germ lines as well as germination capacity of seeds is directly dependent on the nitrogen content of storage tissue. The formation of high value food materials with a high protein content is dependent on a sufficient nitrogen supply. Nitrogen is transported essentially in the form of amino acids. An improvement in the delivery of amino acids to their harvested parts can therefore lead to an increase in yield of agricultural plants. The individual organs allows the qualitative improvement of such organs, which, because of the demands of the utilization process, contain little nitrogen. An example is potatoes, which are grown for the production of starch. Besides this, it is possible to modify the whole plant, by which the growth of individual tissues, for example, leaves, is slowed down, while the growth of the harvested parts is increased. For this, one can imagine a lengthening of the vegetative phase of crops, which leads to an increased formation of storage substances. --

On page 22, line 9:

-- Fig. 3 shows the plasmid pAAP2 which contains the sequence SEQ ID NO:3~~Seq ID No. 2~~. The finely drawn line corresponds to the sequence from pBluescriptSK. The thicker line represents the cDNA insert. The cleavage positions of the inserts are shown. --

On page 24, line 17:

-- In a similar way, from a yeast line that, in spite of the *his4/hip1* double mutation, could be grown in a medium with histidine addition, the plasmid pFL61-aap2 was isolated whose insert was also cloned as a NotI fragment in pBluescriptSK. The resulting plasmid pAAP2 was sequenced and the sequence ~~(SEQ ID No. 2)~~ is given in SEQ ID NO:3~~above~~. The plasmid pAAP2 has a similar structure to pPPP1-20 (see Fig. 1), but instead of the insert SEQ ID NO:1~~No. 1~~, carries the insert SEQ ID NO:3~~No. 2~~ (see Fig. 3). --